

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 7:03 AM

**Daily Diary Report by Bid Item**

Contract No.: 04-0120F4

Diary #: 1085 Const Calendar Day: 658 Date: 24-Mar-2014 Monday

Inspector Name: Brignano, Bob Title: Transportation Engineer

Inspection Type:

Shift Hours: Break: Over Time:

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

**04-0120F4  
04-SF-80-13.2/13.9  
Self-Anchored  
Suspension Bridge****Weather**

Temperature 7 AM

12 PM

4PM

Precipitation

Condition overcast am, clear pm

Working Day ☒ If no, explain:**Diary:**

Dispute

**General Comments**

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:

ABF Engineer Kelvin Chen is working part time in the field and office on CCO 314.

On site today from VGO are Dave Van Dyke, Rob Rutledge, and Nick Buck. Dave flew to the Bay Area either Saturday 3/22/2013 or Sunday 3/23/2014. Nick flies in this morning and is picked up at the airport mid-morning. VGO arrives on site at 0800 (except Nick arriving mid-morning after flight), take lunch 1200 to 1300, and leave the site at 1700.

VGO's main activity today is to connect the strain gauges at the test rigs to the wire runs that lead to the eDAQ data logger. By the end of their shift, they are done with the TR 13 connections and about half done with the TR 12 connections. There is also work on the program to collect the data, add the calculated channels, and produce plots for the two times a day reports.

Crews at the Pier 7 warehouse area are working an 8-hour shift 0700 through 1530 today, with the work of one ironworker and one operator on CCO 314 for portions of the day. At the start of the day, there is no CCO 314 work, but then an ironworker and operator arrive at the CCO 314 test rig area about 0800, after the Monday morning safety meeting and some brief other work. Ironworker Jared Garret works all day on CCO 314 after arriving after the first hour. Operator John Sabatino work portions of today at the test rig area on CCO 314.

With the Saturday 3/22/2014 first coat of paint and the second coat of paint scheduled today on the couplers and jacking rods, there is limited work that ABF can perform today, since the shifting of the jacking rod / coupler in the test rig cannot be done until tomorrow when the second coat of paint is dry. ABF is able to work on the end plates at the jacking end of the test rigs, so that tomorrow's work can be concentrated on the operations that involve the jacking rods.

The ironworker and operator start their work at the test rigs by removing the guide angles at TR's 12 and 13. This is necessary to install the end plates with the jacking rod in place (jacking rod extends north to the guide angles and the guide angles are positioned such that they stick up too high and are too close to each other to install the end plate with the jacking rod through the hole in the middle of the end plate). Then the stainless steel slide plates and the blocking under the plates are shifted back to make room for installing the end plates. The TR 13 north end plate installation starts about 0850. The jacking rod is supported while the end plate is installed with the jacking rod through the hole in the center of the end plate. The 1-1/4" x 8" A325 bolts, nuts, and washers are brought to the test rigs, they are installed, and they are tightened – use compressed air impact gun to tighten snug + 1/4 turn. The TR 12 north end plate



## Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Brignano, Bob

Diary #: 1085 Date: 24-Mar-2014 Monday

installation starts about 1030. This end plate installation is done about 1115. Then the guide angles are reinstalled, with this being complete about 1130 – note that the nuts at the concrete anchor rods for the guide angles are only hand tight for now and will be tightened more at a later date.

The next activity, after lunch, is to install the 4" diameter washers and nuts against the north end plates at TR's 12 and 13. The used and spare nuts for the 4" diameter jacking rods were previously checked and determined to be ok, after which they were stored in ABF's office until they were test fit on the jacking rods about a week ago. The used washers have been stored outside, so the ironworker uses power tools to clean the rust from the bearing surfaces. This is to reduce seating loss by removing the crushable materials and removing the materials which could impact the ability to tighten the nuts during the tensioning steps. After installation of the nuts and washers against the test rig, the jacking beams are installed at TR's 12 and 13. Note that for now the jacking beams are just set on the stainless steel slide plates, which have not been adjusted to the proper elevation. This work is complete about 1345.

After 1345, ABF works on cleanup and moving items at the test rigs in anticipation of future work. There have been 2 generators at the test rig area, but only one is needed for small power tools, so one of the Whisperwatt 7000 generators is removed (take to mechanics area). The south end plates for TR's 9, 10, and 11 have been at the test rigs – none of these are needed with new end plates for the converted TR's 12 and 13 from TR's 10 and 11 – so these extra end plates are removed from the immediate test rig area to get them out of the way of future work. The south traffic plate at TR 9 had been left in place previously and is not needed for TR's 12 & 13, so it is removed from the immediate test rig area to get it out of the way of future work. At about 1445, ABF uses a forklift to get the 2 new end plates for TR's 12 & 13 – these 2 plates are on pallets in the adjacent CCC shop paint area where they had recently been painted with epoxy paint. After moving these 2 new end plates, the final work for the ironworker and operator is miscellaneous cleanup and putting away tools before the 1530 end of shift.

Between about 1300 and 1430, CT-METS Scott Croff and Elijah Turner are present at the test rig area for wire runs for the acoustic emissions monitoring. First, they have ABF use the forklift to move the toolbox with the AE computer from its previous location next to the BayView Trailer to its new location on the slab for TR 8. This is to keep it above the water lake that forms in low areas during rainy weather and to work with the planned wire runs along the south end of the test rigs. Then they run the wires from the datalogger to the test rigs. They do not run the power and network cables from the BayView Trailer to the datalogger because that would place them in a high traffic area between the trailer and the test rig slabs, with ABF using a forklift in this area to move materials. They do not install AE sensors on the rods or couplers in TR's 12 & 13 yet because those steps need to wait for later stages.

CCC works on CCO 314 this afternoon at the test rig area. Working on CCO 314 for CCC are QC Juan Martinez and Painter Victor Ruiz. Present for portions of the work is CT-METS QA Charlie Stewart. This is the second/final coat of paint that is applied today on the rods/couplers after the first coat that was applied Saturday 3/22/2014. After traveling from the bridge where other painting happened this morning, CCC is on site about 1345. The surfaces to receive the second coat are cleaned, the 2 part paint is mixed (epoxy paint - Carboguard 890), and the paint is applied. Today's paint application is by roller and brush. At TR 13 a portion of the jacking rod, the entire coupler, and a portion of the test rod are painted; at TR 12 a portion of the jacking rod and the entire coupler are painted. In addition to the second coat applied, there is some touchup paint applied in the wet chambers, including the holes through the diaphragm plates through which the rods were installed. Painting is complete about 1430. Then there is cleanup to the end of the shift at 1530. Prior to immersion in water, this paint requires 10 days of cure at 60F or 5 days of cure at 75F, per the Carboguard 890 data sheet. Loading of the rods and filling of the wet chambers is tentatively scheduled for April 1, 2014, which is 8 days away which is around the right amount of needed cure time.

A generator – Whisperwatt 7000 – ABF ID 002343 is used part of the day. Another generator – Whisperwatt 7000 – ABF ID 002341 is on idle/standby at the work area and is not used today – this generator is also removed from the CCO test rig site about 1400. An oxyacetylene torch is on idle/standby at the work area. A compressor – IR P185R ABF ID 002078 is on idle/standby at the work area for most of the day and is used briefly when the end plates are bolted along with an impact gun. A Hyster 155 forklift

## Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Brignano, Bob

Diary #: 1085

Date: 24-Mar-2014

Monday

is used for part of the day. An extendable forklift is used for part of the day.

Note that there is k-rail at this work area. Some of the k-rail is rented and addressed by the rental agreement. Some of the k-rail is ABF's k-rail used on site and paid as rented from ABF on a daily basis. To elevate the k-rail, crane mats and timber blocking (12x12's) are in use. The k-rail quantities are as follows:

10' bought k-rail = 20 pieces

10' ABF k-rail = 4 pieces

20' rented k-rail = 16 pieces

20' ABF k-rail = 19 pieces

Note that this includes three 20' ABF k-rail between the CCO 314 work area and FW Spencer's yard, with that k-rail being in place prior to the CCO work and not related to CCO 314.

The agreed extra work with ABF is as follows:

Engineer Kelvin Chen - 6 hrs

Ironworker Jared Garrett - 8 hrs

Operator John Sabatino - 6 hrs

Radios (2 radios) - 14 hrs

Extendable forklift - 6 hrs

Hyster 155 forklift - 4 hrs

k-rail: 16 pcs @20' and 4 pcs @10'

Crane Mats (12x12 - 5'x16') - 4 pcs

Crane Mats (12x12 - 5'x7') - 2 pcs

Crane Mats (12x12 - 5'x8') - 11 pcs

See the attached Extra Work Order - Signed with ABF for CCO 314 work

The agreed extra work with CCC is as follows:

Painter Victor Ruiz - 2 hrs

Carboline Carboguard 890 - 1 gallon

See the attached Extra Work Order - Signed with CCC for CCO 314 work

### INSPECTOR OT REMARK:

Office and Field 2 hours: Working on various testing issues with CT-METS and the DJV, such as reference electrode and pH check changes requested by the DJV. ABF's shift is 0700 to 1530. My shift is 0700 to 1730 and my OT hours are 1530 to 1730.